

DURA CLUTCH

PRECISION PERFORMANCE

DURA CLUTCH INSTALLATION

15-644 DC-RANGER DSL-K-RXS

SVI, LLC 20MAR2026 REV 2

KIT PART #: 15-644

MODEL: DC-RANGERDSL-K_RXS

DESCRIPTION: MY15-18 RANGER 1000 DIESEL ALL MODELS, BOBCAT AND GRAVELY DIESEL (KOHLER)

KIT CONTENTS:

1. 10-394 ASM-DC PRIM 71G EBS RXS -KOHLER
2. 10-398 ASM-DC SECONDARY 9.5 PREM ROLL
3. 35-070 BELT
4. 90-090 QTY 2 WASHER-SHIM 0.843X0.931X0.030 STL
5. 99-036 VIBRA-TITE 122 1.8ML THREADLOCKER
6. 30-091 TOOL-BELT INSTALL
7. 97-067 DECAL-DC CLUTCH HOUSING DASH 35-070
8. 98-066 DURACLUTCH WARRANTY R SERIES
9. 98-157 INSTALL INSTRUCTIONS 15-644 (THESE INSTRUCTIONS)

DURA CLUTCH INSTALLATION

1. Remove the Secondary clutch.
2. Install DURACLUTCH Secondary. If there is a snap ring on the transmission shaft behind the Secondary remove it. Place blue thread locker provided with kit on the secondary bolt and tighten bolt to 45 ft-lbs.
3. Remove Primary clutch bolt. Remove the Primary clutch with puller SVI 99-030. Greasing the end of the puller slightly will aid in removal. Do not get grease on any clutch components.



4. Clean the engine tapered shaft and Primary clutch bore with alcohol or degreaser. Do not lubricate.
5. Slip the belt into the Secondary so you can read the part number on the belt and using Belt Install Tool open secondary so belt will seat down into clutch. Sometimes a screwdriver is needed to assist lowering into clutch.



98-157 Instructions

- Slide belt into primary clutch, then install on post. Use primary hardware removed in step 3.



- Tighten bolt to **60 ft-lbs. VERY IMPORTANT- Overtightening will not allow clutch to operate properly and cause damage and failure of the clutch.** We have a RXS torque holding tool SVI PN 99-034 to assist in holding primary for torquing primary bolt, sold separately.

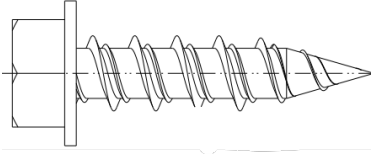


- Set belt tension. Place transmission in Park and make sure machine is turned off. Rotate secondary by hand to seat belt in secondary clutch until belt tension is tight.
- Once belt tension is set, start machine and verify that the secondary clutch has slight to no rotation at idle. (If slight rotation this will go away after belt break-in) If slight to no rotation, proceed to step 11. If the secondary is spinning fast, proceed to step 10.
- If the secondary rotates fast, turn machine off and check to see where the belt is riding in between the primary sheaves. The ideal belt location should be centered with a small gap on each side between the sheaves, a cell phone picture may help see where belt is riding. Follow steps a. or b. to determine the next action.
 - If belt is up against fixed sheave (inward), remove belt and secondary screw & secondary and add one shim washer included in kit onto shaft. Install secondary, secondary screw and belt, start machine to reset alignment. If the secondary still rotates fast and rides against fixed sheave, add another shim washer. Repeat until there is slight to no rotation, remember to blue threadlocker secondary screw when alignment is complete and torque to spec, proceed to step 11.
 - If belt is up against moveable sheave (outward), remove belt, secondary screw & secondary and remove one shim washer. Install secondary, secondary screw and belt, start machine to reset alignment. If the secondary still rotates fast and rides against the movable sheave, remove another shim washer. Repeat until there is slight to no rotation, remember to blue threadlocker secondary screw when alignment is complete and torque to spec, proceed to step 11.

To watch a video on R-Series alignment go to our YouTube channel

<https://www.youtube.com/watch?v=auhMTrhk7Oo&t=17s>

11. . Install outer clutch housing. Ensure seal is good or replace with DURACLUTCH seal part # 35-045. Note: The clutch cover screws are hi-lo screws designed for plastic. They can be used over and over in the same hole but must not be over-torqued. Attach hose to clutch cover and tighten clamp.



Torque spec: 50 in-lbs (4 ft-lbs). This is like a screwdriver torque. Use a hand wrench or a clutch screw gun at a very low setting.

12. Drive vehicle for 5 miles to break-in DURACLUTCH kit components.

NOTE: If the transmission still shifts hard after break-in there are likely issues other than drag in the clutches. See your dealer or call DURACLUTCH service (218-967-8205).

DECALS

13. Apply two decals as shown – one on the clutch housing and one on the dash. Clean surface with alcohol or similar solvent. Decal application is important to alert service technicians that the standard Polaris clutches have been replaced.



DURACLUTCH INSTALLATION SUPPLEMENT

IT IS VERY IMPORTANT TO COMPLETE THESE INSTRUCTIONS OR THE VEHICLE WILL NOT PERFORM SATISFACTORILY

On 2015 models the throttle foot pedal must be modified so the foot pedal will open the throttle fully. Remove and modify per diagram and re-install.

If the engine idle speed is above 1250 RPM it must be lowered to 1200-1250 RPM. This thrust load will cause drag at idle resulting in hard shifting and creeping at idle.

WARNING: WHEN MAKING ADJUSTMENTS MAKE SURE THE SHIFT LEVER IS IN PARK!

1. Before lowering the idle RPM there must be free play in the cable or it will not be possible to make the adjustment. Adjust cable free play per photo instructions.
2. Adjust the idle per photo instructions. The engine must be warm.
3. With the idle RPM lowered the box may resonate when empty causing an objectionable rattle. If so, adjust the box latches per photo instructions.

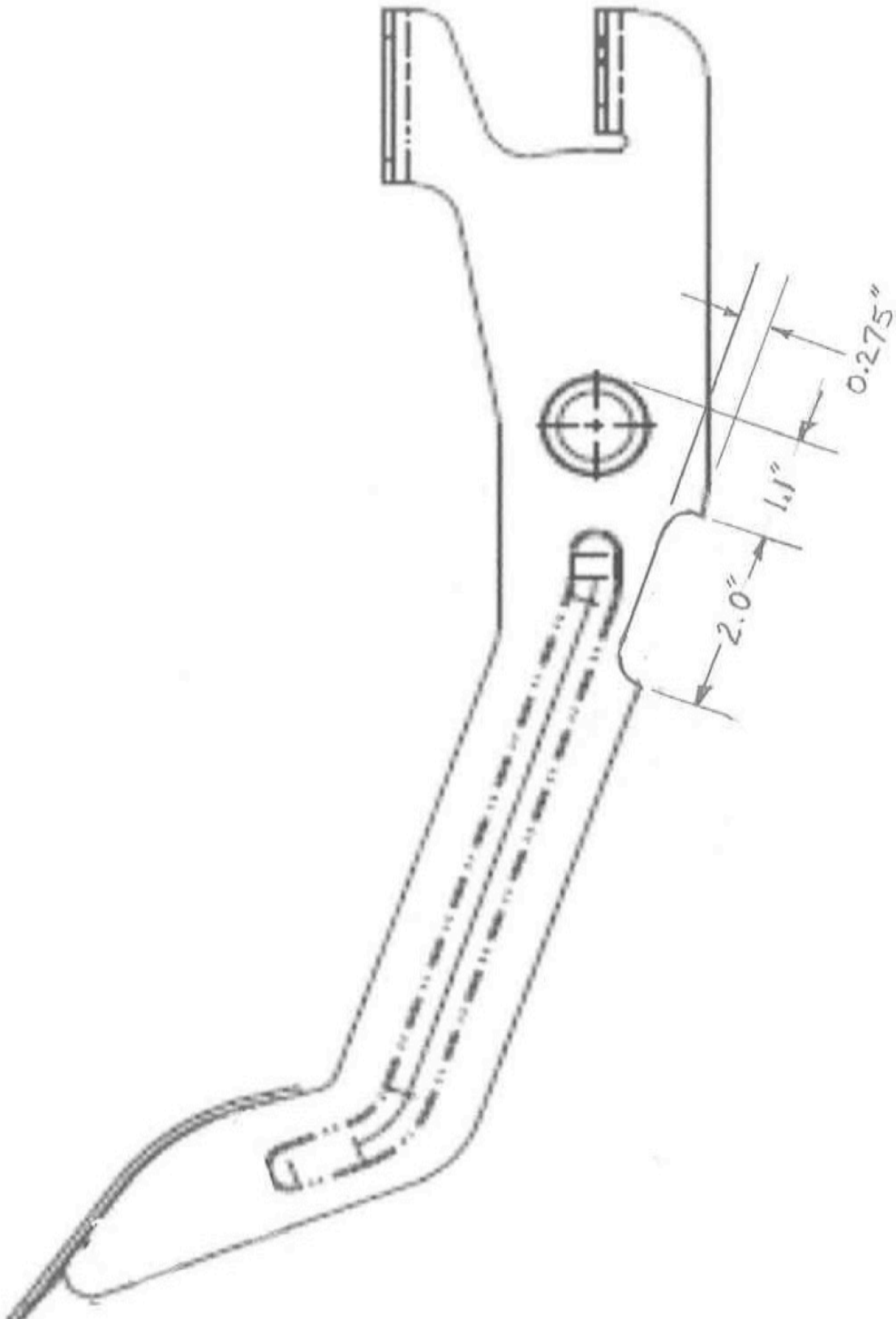
Optional: you can increase full throttle performance if the engine runs less than 3600-3650 RPM under load. Proceed as follows.

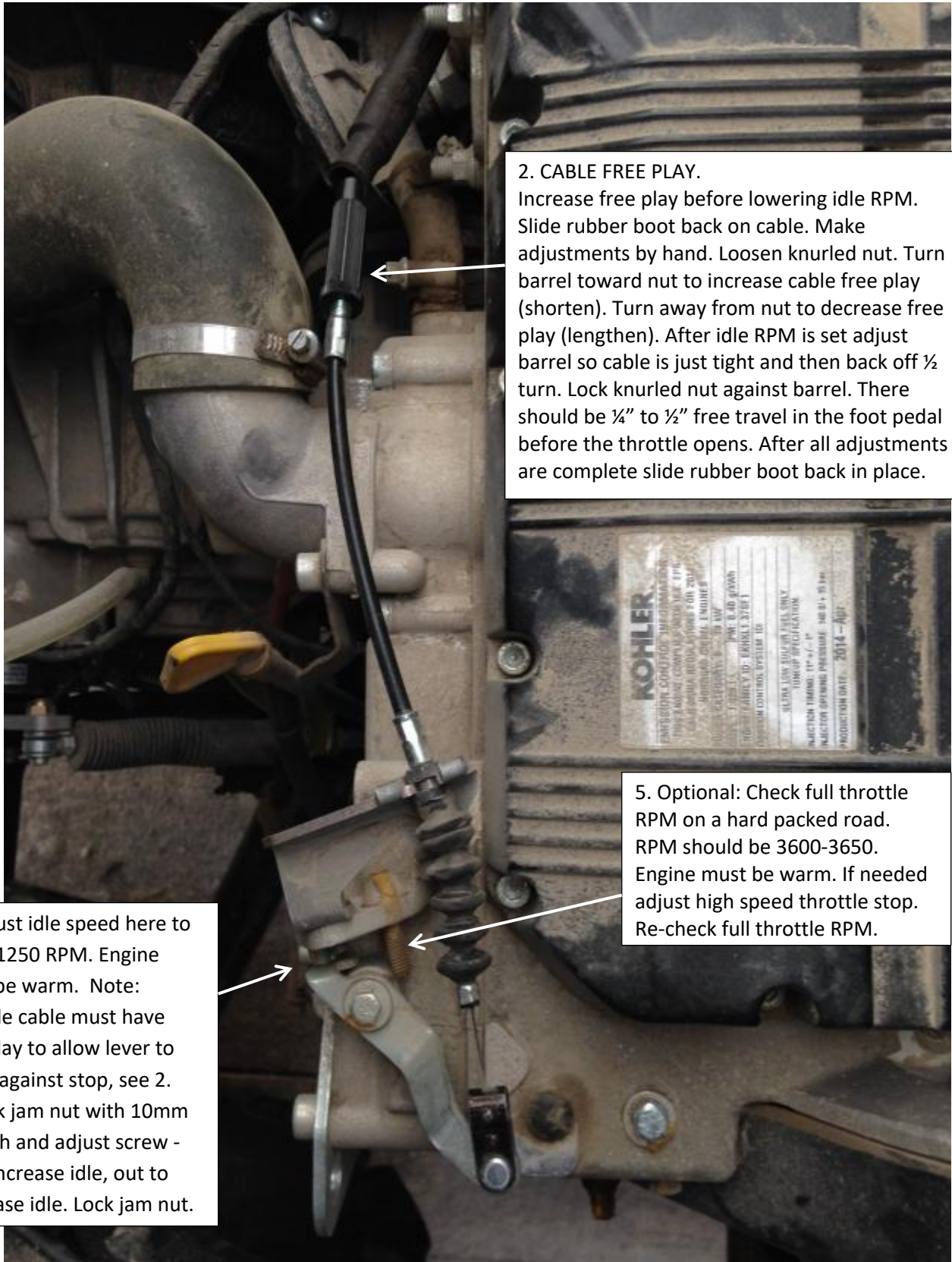
4. Check Engine RPM under load. Run the vehicle full throttle on a level hard packed road and check to see if the engine RPM reaches 3600-3650. If not, adjust the high speed throttle stop to increase the full throttle RPM and check again on the road. If necessary re-adjust until the RPM is 3600-3650 on the road at full throttle. See photo instructions.

Note: The full throttle engine RPM without load should be 3750-3800. You can shortcut the process and adjust as follows.

- Make sure the clutch housing cover is installed
- Place the gear selector in Park
- Check full throttle RPM in Park
- Adjust the full throttle stop to get 3750-3800 RPM
- Check to see if RPM is 3600-3650 under load on the road
- Readjust if necessary

1. 2015 models throttle foot pedal modification





2. CABLE FREE PLAY.
Increase free play before lowering idle RPM. Slide rubber boot back on cable. Make adjustments by hand. Loosen knurled nut. Turn barrel toward nut to increase cable free play (shorten). Turn away from nut to decrease free play (lengthen). After idle RPM is set adjust barrel so cable is just tight and then back off ½ turn. Lock knurled nut against barrel. There should be ¼" to ½" free travel in the foot pedal before the throttle opens. After all adjustments are complete slide rubber boot back in place.

3. Adjust idle speed here to 1200-1250 RPM. Engine must be warm. Note: throttle cable must have free play to allow lever to move against stop, see 2. Unlock jam nut with 10mm wrench and adjust screw - in to increase idle, out to decrease idle. Lock jam nut.

5. Optional: Check full throttle RPM on a hard packed road. RPM should be 3600-3650. Engine must be warm. If needed adjust high speed throttle stop. Re-check full throttle RPM.



4. If box resonates after idle is lowered to 1200-1250 RPM bend tabs down to tighten latches. Adjust both sides. Check to see that latches are fully engaged and locked when box is pushed down firmly.

DURACLUTCH R-SERIES WARRANTY

The DURACLUTCH warranty is separate from the Polaris vehicle warranty. SVI, LLC provides a limited warranty on the DURACLUTCH for defects in materials and workmanship for general consumer use. This includes the primary, secondary and belt. It does not cover claims of defective design. SVI, LLC is responsible for DURACLUTCH warranty.

The warranty term of coverage is as follows:

- Belt: One (1) Year.
- Primary and Secondary: One (1) Year.

The term begins on the date of purchase by the original purchaser. This warranty is transferable to a subsequent owner but does not extend the original term of the warranty.

This limited warranty does not cover acts of God, accidental damage, normal wear and tear, abuse, or improper handling.

The following conditions void the warranty:

1. Improper installation.
2. Installation of tires with a diameter greater than the O.E.M. tire diameter without compensating gear reduction such as portals, transmission gearing or both.
3. Not performing prescribed routine maintenance by removing the clutch housing every 500 miles to 1) blow the dust out of the primary and secondary clutch, 2) examine the belt, and other components for abnormal wear indicating a problem needing corrective action.
4. Not insuring adequate and continuous cooling air through the clutch housing. This includes intake vents and outlets plugged with snow, dust, or debris. SVI offers an Engine and Clutch Intake Kit for certain models that prevent vehicle intakes from plugging with snow and dust.
5. Use of an improper belt. Appropriate DURACLUTCH belt must be used.
6. Modifying calibration, such as primary spring and roller, or secondary spring and cam.
7. Water in the clutch housing. Water damage or rust on clutches, this includes if you have gotten clutches wet while riding, washing the machine or wet when clutches are removed.
8. Abnormal dust conditions such as abrasive dust or running in very dusty conditions without filters or particle separators.
9. Driver abuse such as continuing to operate in HI gear when LO gear is the proper gear.

This warranty replaces all previous warranties expressed or implied.

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